Amendments to the Claims:

Claims 1-21 (Canceled)

22. (Previously Presented) A gripping device for a manipulation system comprising a robot for receiving parts and feeding a manufacturing plant with a workpiece from a readied stack of workpieces, the gripping device comprising a gripper head supporting gripping means, and a detection system for detecting a workpiece received by the gripping means, and comprising at least one pulse emitter acting upon the workpiece to excite vibrations in the workpiece, and at least one vibration sensor for sensing the vibrations of the workpiece, and a memory and/or analytical module structured and arranged to conduct a vibration analysis on a vibration signal from said vibration sensor, wherein the detection system and the memory and/or analytical module jointly form a component part detachably arranged on the gripper head and in communication with a controller of the manufacturing plant via a bus system comprising an ASi bus.

23. (Currently Amended) The gripping device according to claim 22, wherein the pulse emitter has an impact tappet that strikes the workpiece seized by the gripping device with a preset striking pulse with a preset energy and the pulse emitter is provided with a piezo sensor for determining the acceleration of the impact tappet impacting the workpiece and for determining the delay after the pulse has been applied.

24. (Previously Presented) The gripping device according to claim 22, wherein data are wirelessly transmitted between the vibration sensor and/or the memory and/or analytical module and/or the controller.

25. (Previously Presented) The gripping device according to claim 22, wherein the pulse emitter is formed by a striking tappet acted upon by kinetic energy.

26. (Previously Presented) The gripping device according to claim 22, wherein the vibration sensor is formed by an acceleration sensor arranged to be placed onto a surface of the workpiece.

27. (Previously Presented) The gripping device according to claim 26, wherein the acceleration sensor is supported on the gripper head via a contact-pressure-exerting device.

28. (Previously Presented) The gripping device according to claim 22, wherein the pulse emitter is provided with the vibration sensor.

29. (Currently Amended) A method for feeding workpieces from a stack of workpieces to a metal sheet folding machine for reshaping the workpieces by folding with a manipulation system, comprising the steps of:

gripping a workpiece at a top of the stack of workpieces using a gripping device;

lifting the gripped workpiece up from the stack with the gripping device;

exciting vibrations in the lifted workpiece using a pulse emitter arranged on the gripping device and acted upon by a controller;

sensing the vibrations in the workpiece using a vibration sensor arranged on the gripping device;

recording signals from the vibration sensor in a memory and/or analytical module; and

comparing a vibration spectrum of the workpiece stored in said module with reference vibration data;

wherein the vibration sensor is applied to a surface of the workpiece by a contact pressure-exerting device, whereupon a pulse is applied to the workpiece by the pulse emitter with a contact time of about 200 ms for exciting vibrations.

30. (Previously Presented) The method of claim 29, wherein the comparing step comprises comparing the vibration spectrum with reference data so as to determine whether one

or more additional workpieces is/are stuck to the workpiece gripped by the gripping device.

31. (New) The gripping device according to claim 22, wherein the memory and/or analytical module is structured and arranged to record signals from the vibration sensor, and to compare a vibration spectrum of the workpiece with reference vibration data so as to determine whether one or more additional workpieces is/are stuck to the workpiece gripped by the gripping device.

32. (New) The gripping device according to claim 22, wherein the memory and/or analytical module is structured and arranged to record signals from the vibration sensor, and to compare a vibration spectrum of the workpiece with reference vibration data so as to determine via the vibration spectrum whether the seized workpiece is the correct part.